

20
In
Inaugural
Dissertation

James
#9

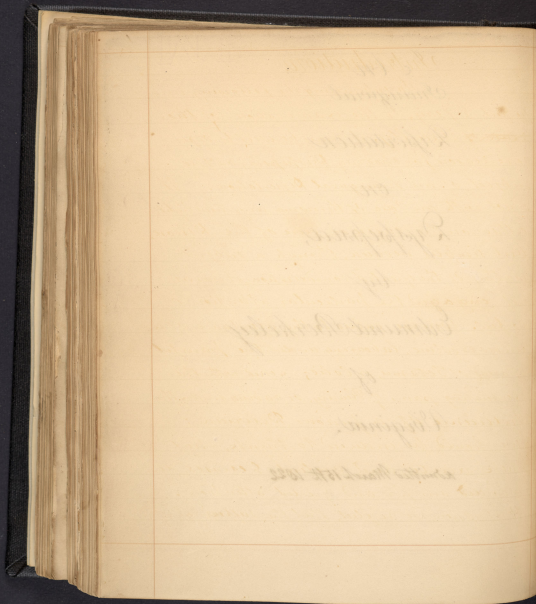
on
Dyspepsia,
by

Edmund Berkeley

of
Virginia.

admitted March 15th 1822

5th



Introduction.

In submitting the following imperfect Essay, to the examination of the ~~Board~~ Faculty, it may be well to offer some reason for choosing Dyspepsia, as the subject of an Inaugural Dissertation. It is not with an Idea of throwing any new light, either on the cause or cure of the Disease, but simply because, though a subject worthy of the greatest consideration, it has as yet engaged the particular attention of so few. Were we called to the assistance of a fellow creature, labouring under the painful spasms of Tetanus, or Colic; racked with the excruciating pains of Pleurisy, or raving under the Influence of a furious Delirium: we should be induced to think, that these acute, and violent Diseases, demanded our first and greatest attention. But when we reflect, that the sufferings of

[Faint, illegible handwriting, likely bleed-through from the reverse side of the page.]

patients in such cases, tho extreme, are short; that the subjects of Chronic affections, are sufferers for months, and even years; and during this time, if they are not labouring under acute pains, yet they are completely deprived from all social enjoyment, and left to their gloomy reflections, heightened no doubt by Disease: that their Malady often baffles the greatest Skill, and their days of Misery protracted till they have "no pleasure in them"; we shall be willing to allow, that Chronic Diseases justly claim an important consideration. In this Class of Diseases, Dyspepsia holds an important place. The consequence of a depraved condition of that function, by which the whole animal Economy is supported, must be apparent; and an enquiry into the nature of the causes and cure of that condition, cannot be unimportant. Considering the number of Medical Writers, who have lately published their opinions to the world; it appears somewhat sin-

gular, that so interesting a subject as the present, should have escaped their attention.

If there are disorders which cause more acute suffering, and whose general termination is more fatal, yet there are none in which the aggregate suffering of the Patient is greater, and in which his situation is, for so long a time, and so truly deplorable, as in Dyspepsia.

Moreover, the nature of the remote and proximate causes, the numerous train of Diseases, which may be induced by it, and for which it may be mistaken; the important Station in life, of those who are most liable to its attacks, together with the uncertainty, if not the difficulty of its cure; all conspire to render it a subject, not unworthy of talents, which have often been bestowed upon subjects, of infinitely less importance. Therefore in this attempt, I feel and acknowledge, my total inability; and beg that, an eye of leniency, may be cast over all my fail-

ings. If in offering my opinions, or differing from others, I have at any time expressed myself harshly, I deny all intention to offend. as I have always quoted the Ideas, rather than the words of authors, it may be supposed, that I intend them as original, but to originality, I disclaim all title: and candidly acknowledge that my Ideas have been collected from Authors whom I have read, or the Lectures which I have attended in the University of Pennsylvania, and should the Faculty see fit to honour me with that Mark of Distinction, at which, this Essay is an attempt, it shall ever be my first wish to deserve it, and to use my best efforts towards the advancement of Medical Science, and the benefit of Mankind.

Before treating of Dyspepsia, or a diseased state of the Digestive Organs, it may not be improper to say something of the Natural, or healthy process of Digestion. In doing which, after so many Physiologists have failed, I shall not attempt any thing new; but shall simply describe the process of Assimilation, together with the most probable causes, as related by the most modern and approved authorities. Happily for Man, the pain arising from the Sensation of Hunger, and the pleasure resulting from its Gratification, together with that innate principle of Self-preservation, offer inducements sufficient to overcome his native Indolence and love of ease. When the Stomach becomes empty, and thus deprived of its accustomed Stimulus - exposed also to the undiverted action of the Gastric Fluid - and perhaps suffering an unusual irritation, from the unsupported

wright of the liver - the Sensation of Hunger is produced. To satisfy the cravings of Nature, the food is introduced into the mouth, there by the organs of Mastication, the Tongue and Buccinator Muscles, it is broken down, and mixed with the saliva. being formed into a mass, it is pressed by the tongue against the palate - carried backwards and upwards, where it meets with the Pharynx - the *rimula Glottidis* is closed - and by the action of the Muscular fibres of the Pharynx and *Oesophagus*, it is forced into the Stomach. The food thus introduced into the Stomach, fitted for the organs of Digestion, is immediately acted on by the Gastric liquor, which assisted by the warmth of the part, penetrates and completely dissolves it. The Nature of the food taken in, is now entirely changed, and brought into an homogeneous Mass; so that the Quality of no article can be distinguished. But the food though altered,

is not yet prepared for the nourishment of the System; it has still to undergo considerable changes, by the action of other parts of the Digestive Apparatus. When the aliment becomes mixed with the fluids of the Stomach, the mass is considerably increased in bulk; the stimulus of distention, then causes the peristaltic motion of the Stomach to increase, by which, its contents are carried through the pyloric orifice, into the Duodenum, there to be subjected to the action of the Bile and pancreatic juice. The irritation arising from a distention of the Duodenum with the chyme, propagated to the gall-bladder, causes an increased discharge of Bile, which together with the pancreatic fluid, is poured in considerable quantities, into the cavity of the Intestine, and mixes with its contents. By the action of these fluids on the chyme, its properties become greatly altered; from a pulsatious, indifferently coloured mass, it is converted into a whitish, milklike

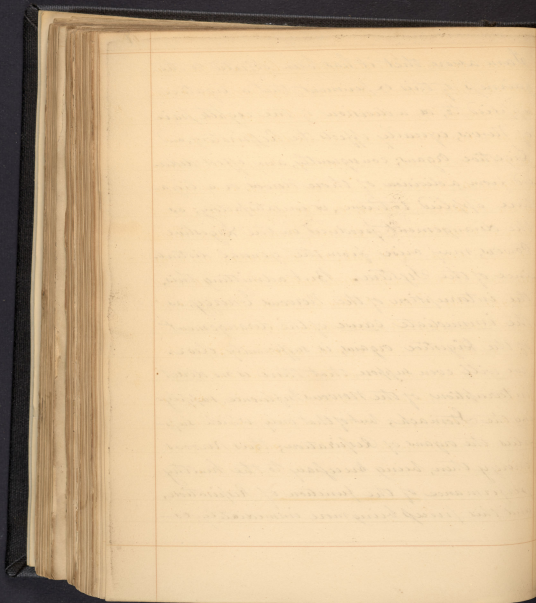
the first object of the human mind is to
ascertain the truth of the things which
are presented to its view. This is the
natural and necessary end of all
human knowledge. The mind is
not content with the mere
appearance of things, but it seeks
to penetrate to their essence, to
discover the laws which govern
their being and their action. This
is the true philosophy, the science
of the mind, the science of the
universe. It is the science which
teaches us to think, to reason,
to feel, to act. It is the science
which gives us the power of
knowledge, the power of truth, the
power of life. It is the science
which is the foundation of all
other sciences, the foundation of
all human progress. It is the
science which is the key to the
mysteries of the universe, the
key to the secrets of the soul.
It is the science which is the
light of the human mind, the
light of the human heart, the
light of the human world. It is
the science which is the source of
all human wisdom, the source of
all human virtue, the source of
all human happiness. It is the
science which is the life of the
human mind, the life of the human
heart, the life of the human world.
It is the science which is the
truth of the human mind, the
truth of the human heart, the
truth of the human world. It is
the science which is the life of the
human mind, the life of the human
heart, the life of the human world.
It is the science which is the
truth of the human mind, the
truth of the human heart, the
truth of the human world. It is
the science which is the life of the
human mind, the life of the human
heart, the life of the human world.

fluid, denominated Chyle. This Union, by which the Chyme, is converted into Chyle, has been supposed to be purely chemical. But to this opinion, an insuperable objection arises, which is, that the process cannot be imitated without the body. When two substances of different natures, are brought together, and a third is produced, having qualities differing from either of the foregoing, it cannot be denied that the action is chemical; but it is only contended, that this action is dependent on a principle, which does not assist it out of the Stomach.

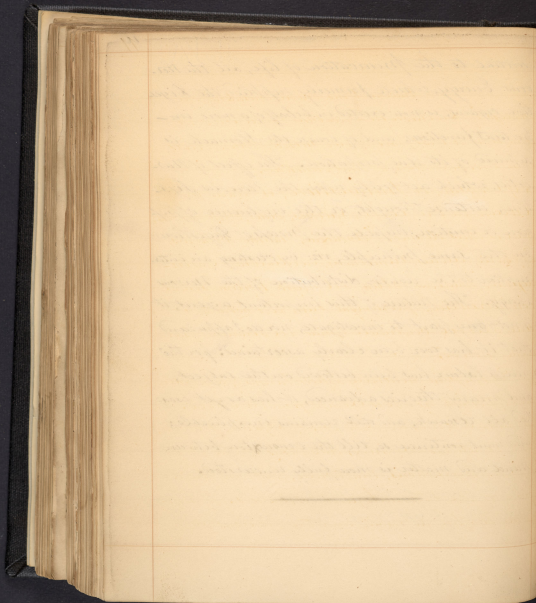
This principle, is no doubt that Nervous Energy, by which are carried on, all the operations of the Animal Economy. It has been proved by experiment, that a ligature applied to the eighth pair of Nerves, completely impedes Digestion, and hence it is evident, that some Influence conveyed by these Nerves, is essential to the performance of that process.

I am aware that it has been objected to the
fairness of this experiment, that a ligature
applied to, or a division of the eighth pair
of Nerves, equally effects the Respiratory, and
Digestive Organs; consequently, any effect deduc-
ed from a division of those Nerves, or a liga-
ture applied to them, is unsatisfactory; as
the derangement produced in the Digestive
Powers, may arise from the general disturb-
ance of the System. But admitting this,
the interruption of the Nervous Energy, as
the immediate cause of the derangement
of the Digestive organs, is sufficiently clear.

We will even suppose, that there is no direct
interruption of the Nervous Influence, supply-
ing the Stomach; but of that only, which sup-
plies the organs of Respiration; this Nervous
Energy then, being necessary to the healthy
performance of the function of Respiration,
and this process being more immediately es-



essential to the preservation of life, all the Nervous Energy, which formerly supplied the Digestive organs, is now exerted in behalf of a more important function, and of course the Stomach is deprived of its due preparation. The effect of Narcotics, which act solely upon the Nervous System, intense thought, or the influence of passion or emotion, impede the process of Digestion on the same principle, viz: by creating an interruption to the regular distribution of the Nervous Energy. The Nature of this important agent, it is not my part to investigate, nor do I apprehend that it has ever been clearly ascertained: for tho' much labour has been bestowed on the subject, and many theories advanced, it has as yet escaped all research, and still remains inexplicable; and must continue so, till the connexion between Mind and matter is more fully understood.

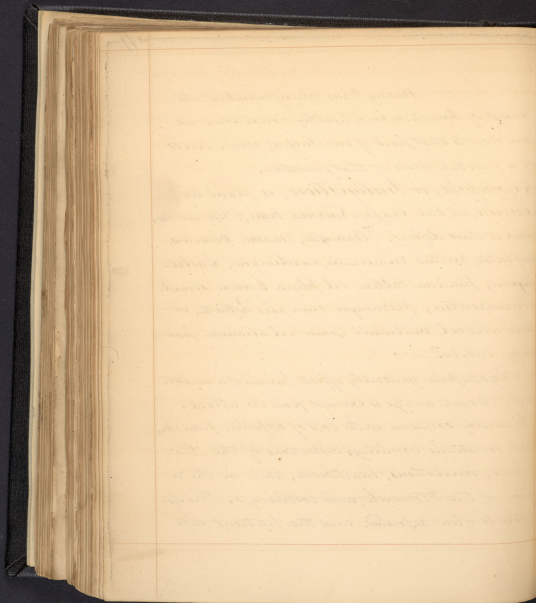


Having thus briefly considered the process of Digestion in a healthy condition, we come now to that part of our Subject, which treats of a morbid state of that function,

Dyspepsia, or Indigestion, is placed by Cullen, in the Class, Neuroses, order, Adynamias, and is thus defined, "Anorexia, Nausea, Vomitus, inflatio, eructus, rumination, cardialgia, Gastralgia, pauciora sattem vel plura horum simul concurrentia, plerumque cum alio ^qstricta, et sine alio vel ventriculi ipsius vel aliarum partium morbo?"

Dyspepsia generally affects persons of a middle age, though no age is exempt from its attack.

It usually comes on with loss of appetite, Nausea, and sometimes vomiting; distensions of the Stomach, eructations, heartburn, pain in the region of the Stomach, and costiveness. The appetite is often depraved, and the patient eats



voraciously, sometimes he may eat heartily, though there is a complete disrelish for food.

There is also feverishness, with almost constant thirst, paleness of the countenance, and languor; and towards the close of the disease, anasarcaous swellings. Besides these, the patient is often affected with vertigo, pains in the balls of the eye, imperfect or double vision, ringing of the ears, and palpitation. The mind is extremely irritable and desponding, the countenance expressive of the greatest anxiety; the pulse is frequent and full, though sometimes chorded; the slightest exercise produces fatigue, together with perspiration. During the night there is extreme restlessness, and the sleep which affords little refreshment, is disturbed with startings, and frightful dreams. Occasionally there is much moaning, with a sense of weight in the chest, and sometimes the disease is complicated with pyrosis.

Proximate Cause.

A loss of tone in the muscular fibres of the Stomach, is considered by Ludden, as the proximate cause of Dyspepsia. Some have supposed it to be dependent on a vitiated state of the fluids subservient to the digestive functions; and others, a deficiency of the gastric liquor. That a loss of tone, does take place in Dyspepsia, will not be denied, but this we consider as an effect of the true cause. It is evident that a loss of tone in the muscular fibres of the Stomach, cannot account for a derangement of the process of Digestion, since that process is not the result of muscular action. A vitiated condition of the fluids of the Stomach as to quality and quantity, is readily admitted as occurring in Dyspepsia, but this we likewise attribute to a primary cause, of which it is only an effect, since there can be no derangement of the fluids, but thro' the medium of the Solids. This depressed condition of the fluids then, may be traced to the impacity of the muscular fibre, but this inability we consider as the

effect of a pre-existent cause, which remains to be examined. we have shown, that by a division of the eighth pair of Nerves, Digestion is greatly hindered, if not entirely stopped, consequently the influence conveyed by these Nerves, is essential to the Digestive process, and a deficiency of it, must be the proximate cause of all morbid action in the Stomach. To this cause we attribute the loss of tone in the muscular fibres of the Stomach, and every depressed condition of the Gastric fluids. All those circumstances which tend to divert, or destroy this Nervous Influence, we consider as the

Remote Causes.

These are considered by Cullen of two Kinds.

First: Those which act directly on the Stomach.

Second. Those which act upon the whole Body, but in consequence of which, the Stomach is chiefly affected.

Among those of the First Kind, he considers,

1st The action of certain sedatives, or Narcotics, as Tea, coffee, tobacco, opium, &c.

2.^d The large and frequent drinking of warm water, or other watery liquids.

3.^d Frequent Laxating, or immoderate repletion of the Stomach.

4.th Frequent Vomiting, and

5.th Frequent Spitting, or rejection of Saliva.

Although the use of those articles which batten or nourish 'certain sedatives,' when carried to excess, produces effects highly deleterious, yet it is remarkable that there is not a sedative among them, but on the contrary, all possess properties of an opposite nature. The causes mentioned under head 2.^d & 3.^d might with great propriety be considered under one head, as it would be almost impossible to distinguish the effects arising from them separately. Vomiting cannot be considered as the primary cause, but must depend on some previously diseased state of the Stomach. An increased discharge of saliva, seldom takes place, but in consequence of disorder of the Stomach, or salivary glands, or from chewing some acrid substances. one of the most

1840
The first of the year was a very dry one, and the
season was generally unfavorable for the crops.
The wheat was very poor, and the corn was
very small. The cotton was also very poor, and
the sugar cane was very small. The rice was
very poor, and the other crops were also very
poor. The season was generally unfavorable for
the crops, and the weather was very dry.
The first of the year was a very dry one, and
the season was generally unfavorable for the crops.
The wheat was very poor, and the corn was
very small. The cotton was also very poor, and
the sugar cane was very small. The rice was
very poor, and the other crops were also very
poor. The season was generally unfavorable for
the crops, and the weather was very dry.

frequent cause of the rejection of saliva, is the use of tobacco; and when we reflect how universal is the practice of chewing tobacco, we must acknowledge that neither this, nor the rejection of saliva, its necessary consequence, can be so frequent a cause of Dyspepsia, as is commonly imagined. Yet an abuse of tobacco, I wish by no means to exclude as a remote cause of Dyspepsia. Does Dyspepsia ever occur in consequence of Salivary fistulae, where great quantities of saliva are daily discharged?

The second class of causes laid down, seems to admit of another division, into,

- 1.st Those which act directly on the body, and
- 2.^d Those which affect it through the medium of the mind.

Those which act directly on the body are,

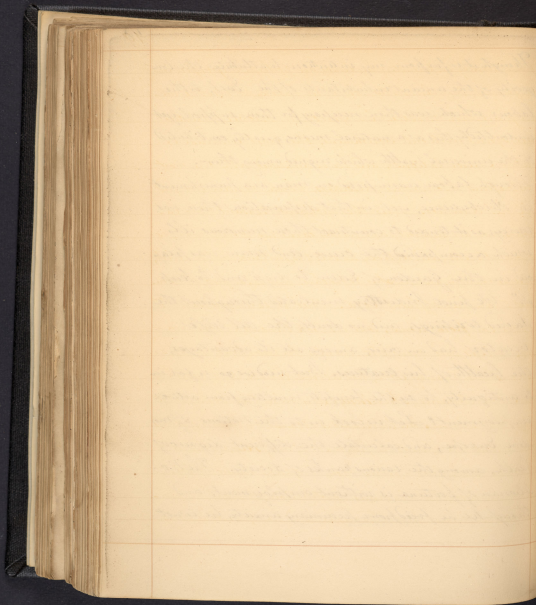
- A. An indolent and sedentary life.
- B. Excessive Venery.
- C. Frequent Intoxication.
- D. Exposure to moisture and cold without Exercise.

The First of these causes then, is an Indolent Life.

If we take a survey of Mankind, we shall find it universally the case, (exclusive of the influence of Climate,) that health is in proportion to the degree of Exercise taken. But I wish not to be understood as saying, that the use of Exercise, or any other means, is sufficient to do away the liability to bodily infirmity, for since the creation of Man, there have been outlets to his existence, and the Sciences of Medicine together with every other means, must ever be incompetent to the prevention of Disease. By health, I wish to be understood an exemption from Chronic, or Epidemic affections; and the term Chronic I also use in a qualified sense. Under Chronic affections, I only include those Diseases, which instead of being violent, painful, dangerous, and speedily terminating; are comparatively mild, though disfiguring and protracted. A freedom then from Chronic complaints, is in a great measure dependant upon a due proportion of Exercise.

15
Though it is far from my intention, to attribute the longevity of the ancient inhabitants of the East, to the labour which was then necessary for their support, yet undoubtedly this as a natural means, greatly contributed to the universal health which reigned among them.

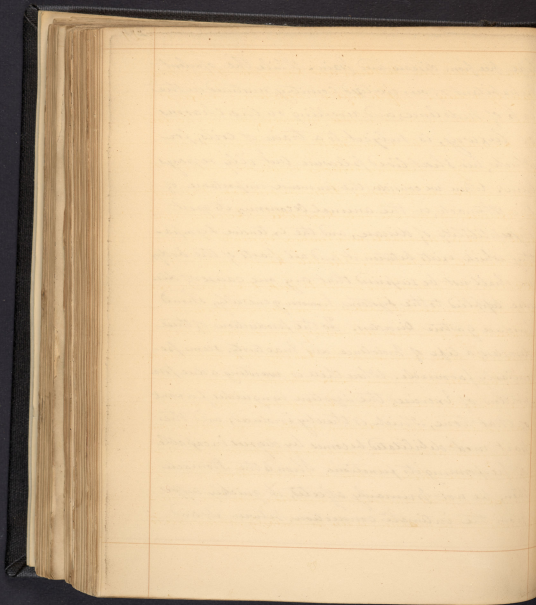
Though labour was imposed on man as a punishment for disobedience, yet in that dispensation there was mercy, as it tended to counteract those numerous ills which accompanied the curse. And man was placed in the Garden of Eden to dress and to keep it." We find Industry inculcated throughout the Sacred writings, and no doubt, the All Wise Creator had in view, among all its advantages, the health of his creatures. But need we go so far in to antiquity, to see the benefits resulting from active employment? Let us look in to the Nations of modern Europe, and calculate the different degrees of health, among the various ranks of Society. The Nobleman of fortune is without employment, and though he be freed from pecuniary anxiety, he is not



from bodily infirmity; his limbs are perhaps misshapen in infancy, by Rickets, or, if he has escaped that malady, are now swollen by Gout; his sleepless nights are spent without refreshment, the least unusual exertion causes fatigue, and he is distressed with the most distressing Stomachic disorders, which render insipid all his dainties. While the indigent peasant who labours for his support, and hardly earns his brown loaf, is strong, staid, and active, he eats his pittance with relish, sleeps soundly, and awakes refreshed, and is far more to be envied than his affluent lord. But it is unnecessary to go so far from home. Let us look through our native wilds, and view the hardy Inhabitant of the forest; his manly form, his active limbs, and healthful countenance, strikingly exemplify the beneficent effects of Exercise. His livelihood is obtained by hunting, days and nights he spends in pursuit of his prey, without food or rest, but being from infancy inured to toil and hunger, his vigorous constitution, without inconvenience, bears him through, and he spends a long

[Faint, illegible handwriting in cursive script, likely a historical document or letter.]

life, free from disease and pain. While the opulent inhabitant of our civilized country, nurtured in the lap of Indolence, and revelling on the charms of luxury, is subject to a train of evils, for which, his short lived pleasure but illly repays him. When we consider the immense importance of the Stomach, in the animal Economy, its great susceptibility of disease, and the extensive sympathy which exists between it, and all parts of the body, we shall not be surprised that any one cause of disease applied to the system, however generally, should produce gastric disorders. To the production of these disorders, a life of Indolence and Inactivity, seems peculiarly favourable. Where there is wanting a due proportion of Exercise, the system languishes for want of that tone, which is thereby induced; and the part most debilitated, becomes by degrees incapable of performing its functions. Should the Stomach then, be not primarily affected, it quickly suffers from the intimate connection, between it, and



other parts of the System; and Dyspeptic Symptoms
 shortly cured. If a life of Indolence renders
 the system liable to disease generally, and particu-
 larly Dyspepsia, by depriving it of that tone, which
 is necessary to healthy actions, so also will a life of
 fashionable dissipation. If in the one case, the want
 of Exercise, renders the body susceptible of Diseases, in the
 other, the unseasonable and unduly regulated Exercises,
 contribute to that end. The late hours which the
 votaries of fashion, are wont to keep, the sudden ex-
 posure from heat to cold, (the necessary consequence of
 attending the crowded places of fashionable resort,)
 tend not only to diminish the healthy tone of the Sys-
 tem, but also to produce other affections, which may
 be indirectly, the cause of Dyspepsia. The present
 fashionable mode of sleeping, by which the body is com-
 pressed into as narrow a compass as possible, indepen-
 dent of the thin texture of the clothing, which
 scarcely affords sufficient protection, from the inole-
 mency of the weather, is also particularly favourable to

The first of these is the fact that the
 number of cases of disease is increasing
 rapidly. This is due to a number of
 causes, including the fact that the
 population is increasing, and the fact
 that the climate is becoming more
 favorable to the spread of disease.
 The second cause is the fact that the
 people are becoming more careless of
 their health. They are eating more
 food, and drinking more alcohol, and
 are not taking as much exercise as
 they should. This is leading to a
 general weakening of the system, and
 is making the people more susceptible
 to disease. The third cause is the
 fact that the people are becoming more
 crowded together. This is leading to
 the spread of disease from one person
 to another. The fourth cause is the
 fact that the people are becoming more
 careless of their surroundings. They are
 not cleaning their houses, and are not
 taking any measures to prevent the
 spread of disease. This is leading to
 a general increase in the number of
 cases of disease.

the production of those causes, which bring on Dyspnoea. It would seem almost unnecessary to offer an explanation of the modes of remedy, of these causes I will briefly give my Idea of it. The dress is so confined, as to press upon the greater part of the thorax and abdomen; by which means, Respiration is greatly impeded, and unless the chest be very capacious, and the lungs remarkably sound, the latter are liable to be affected; but should they escape, the connections between them, and the Stomach being so intimate, the Nervous Energy, which formerly supplied the latter organ, is now necessary to the assistance of the more important operation of Respiration; and thus the Stomach becomes disordered from a deficiency of its accustomed Stimulus. But independent of the action on the lungs, the extreme pressure, upon the neighbourhood of so important a viscus as the Stomach, for so long a time, must alone be productive of disorders of that organ, on the principle of an abstraction

The first thing I noticed when I stepped
 out of the car was a warm blanket of
 sunlight. The air was crisp and clean,
 a stark contrast to the smoggy city I
 had just left. I took a deep breath, savoring
 the fresh scent of pine and earth. The
 landscape was breathtaking, a vast expanse
 of rolling hills and valleys. The colors were
 vibrant, the greens of the fields and the
 blues of the sky. It felt like I had entered
 a new world, one of peace and tranquility.
 I walked along a dirt path, the wheels of
 the car still fresh in my mind. The path
 led me through a forest of tall, slender
 trees. Their leaves were a mix of green and
 gold, suggesting the early days of autumn.
 The sunlight filtered through the canopy, creating
 a dappled pattern on the ground. I stopped
 for a moment, looking up at the towering
 trunks. They stood so close together, their
 branches reaching towards the sky. It was
 a sense of awe that washed over me, a
 reminder of the power and beauty of nature.
 I continued my journey, the path leading
 me to a small clearing. In the center stood
 a lone tree, its branches spreading wide
 like a giant's arms. The ground around it
 was covered in fallen leaves, a carpet of
 gold and brown. I sat on a log, watching
 the leaves swirl in the breeze. The sound
 was like a symphony, a beautiful melody
 of nature. I felt a sense of peace, a
 connection to the earth that I had never
 felt before. It was a moment of pure
 joy, a reminder of the simple pleasures
 of life. I stayed there for hours, watching
 the sun set and the stars appear. The
 night was magical, the stars so bright
 and clear. I felt like I was looking
 up at a new universe, one of wonder
 and mystery. I knew that this was
 a special place, a place where time
 stood still. I would never forget this
 journey, this moment of discovery. It was
 a journey of the heart, a journey that
 had brought me to a place of peace and
 tranquility. I was home.

of nervous Influence. It may be difficult to determine whether the Male, or female sex, suffer most from this cause; if the latter, it must be rather owing to the delicacy of their frames, than to their mode of dressing being more calculated to produce the effects just described.

The second cause to be considered is "Excess in Debauchery." Upon this head it will be needless to say but little: the debilitating effects of an excess in debauchery, are too well known ^{to require} to be described. But those who yield to the baleful influence of Debauchery, suffer not from an immoderate indulgence in the pleasures of Venus alone. The scene of their guilt and folly is generally some wretched brothel, where Lasciviousness alone is a snare to their crime. Their sleepless nights are spent in drunkenness, rioting and wantonness, their days in bitter reflection on the past, or painful apprehension of the future. Under these circumstances, a detraction of Nervous Energy from its appropriate organs, is evident, and the Sto-

much as usual, partaking of the general Disadvantage, is deprived of its necessary incentive to a healthy action.

The next cause is "Frequent Intoxication," and the enervating consequences of this pernicious practice, is too common and too evident, to require a ^{prolix} lengthy consideration. The Modus operandi of this cause, is sufficiently clear. The Nervous Energy is called to resist the attack of a destructive enemy, which by its increased exertion, it succeeds in overcoming, but at length being exhausted, and the Stomach deprived of its necessary agency, the digestive organs cease to perform their natural functions. The System thus being deprived of the Means of restoring exhaustion, it becomes necessary to keep up the excitement on the Stomach, and the wretched Victims of Intemperance is obliged, either gradually to diminish the Stimulus, (and this, few have resolution to perform,) or for the support of a miserable existence, to continue a practice, which must sooner or later, end in their destruction.

The last cause under this head, still remains to be considered, viz: "Exposure to cold and moisture without Exercise." This at first, might not appear to evident a cause of Dyspepsia; but if we recollect the intimate sympathy existing between the Stomach and Surface of the body, it will be more apparent. When the body is exposed to the action of cold and moisture, it becomes necessary that an unusual exertion of the Vital principle should be made, in order to prevent any injurious effects, arising from such exposure; in consequence of which, the Stomach loses its proportionate supply of Nervous Energy, and is subjected to disease.

We have now come to the last Class of the causes of Dyspepsia, and under it we include two heads.

a. Exaction of mind and the Influence of other disorderly Passions.

b. Intense Study or application to business.

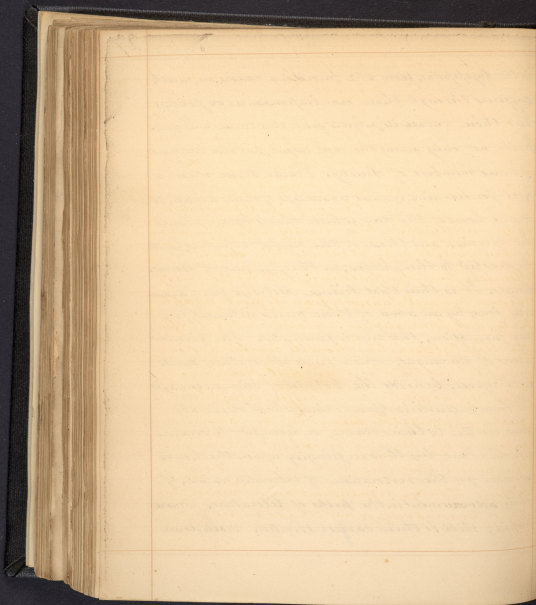
a. Exaction of mind &c. Directly, and indirectly misceable, are the objects, in whom Dyspepsia is produced from this cause. Directly misceable, in being the

degraded victims of passions, and indirectly so by thus becoming the subjects of a disease, which will but tend to increase the action of such a cause, which again tending to reproduce its effects, there will be established a diseased action and reaction, which it will not only be difficult to overcome, but also to render it extremely uncertain, to determine, which was the cause, or effect. As the action of the mind on the body, is through the medium of the Nervous System, it will not be difficult to conceive how, overaction of mind, or the influence of Fear, Grief, anger, or Jealousy, &c. can create such disturbances in that system, as to prevent the necessary supply of Nervous Energy, to the various organs. The last cause is,

b. Intense Study, or application to business.

The action of this cause may be traced partly to the effect produced on the mind and partly on the body. For while intense thought operates solely through the medium of the mind, the confinement and want of exercise, entirely effect the body. Persons affected

with Dyspepsia, from the preceding causes, are mostly
 sufferers through their own imprudence or folly;
 but those who are its subjects from this cause are gen-
 erally not only among the most useful, but also the most
 virtuous members of Society. I mean those whom a
 zeal for learning, induces regardless of their health, to
 spend hours of the day, which should be employed
 in exercises and those of the night which should
 be devoted to their pillow, in the pursuit of know-
 ledge. It is thus that Science destroys her favour-
 ite sons; by an abuse of those means, intended for
 her promotion, the end is frustrated. The silent
 hour of Midnight, which finds all nature sunk
 into repose; beholds the votaries of Science, engaged
 in some interesting speculation, which shall add
 new lustre to their name, or benefit to man-
 kind. But by thus infringing upon the hours
 designed for the restoration of exhausted natures, if
 their advancement in the paths of literature, is more
 rapid, still is their career shorter. Worn down

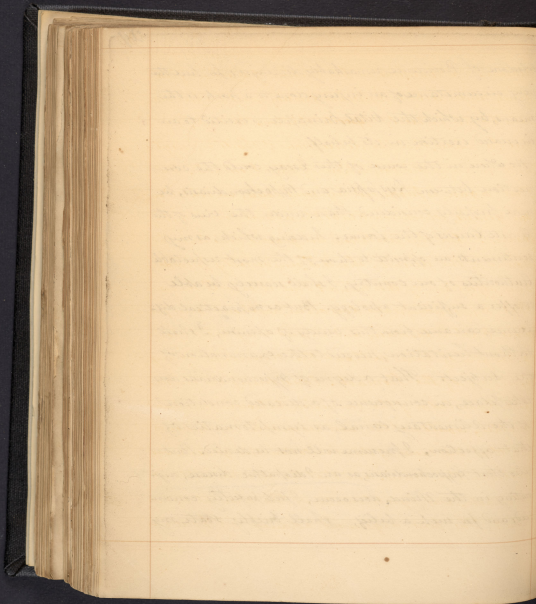


at length, by continual watching, Vitality retires from her outposts, to make her final stand in the citadel: all parts of the body are now subject to diseased action, and the Stomach, from its great susceptibility, and also from its intimate connexion with the Brain, becomes particularly liable to derangement. Having thus imperfectly considered those causes, which tend remotely to the production of Dyspepsia, it may be enquired, why should the Stomach, be so particularly affected by the loss of Nervous Energy? I answer, from its great susceptibility, and primary importance in the System, the slightest derangement from its regular action, being felt by the whole animal Economy. Why then do not the lungs suffer, seeing their great importance? The immediate and absolute importance of the lungs, for the support of Existence, renders it impossible that they should suffer, without thereby, demanding an additional supply of Nervous Energy; and thus do we see the

The first of the three is the
 second of the three is the
 third of the three is the
 fourth of the three is the
 fifth of the three is the
 sixth of the three is the
 seventh of the three is the
 eighth of the three is the
 ninth of the three is the
 tenth of the three is the
 eleventh of the three is the
 twelfth of the three is the
 thirteenth of the three is the
 fourteenth of the three is the
 fifteenth of the three is the
 sixteenth of the three is the
 seventeenth of the three is the
 eighteenth of the three is the
 nineteenth of the three is the
 twentieth of the three is the
 twenty-first of the three is the
 twenty-second of the three is the
 twenty-third of the three is the
 twenty-fourth of the three is the
 twenty-fifth of the three is the
 twenty-sixth of the three is the
 twenty-seventh of the three is the
 twenty-eighth of the three is the
 twenty-ninth of the three is the
 thirtieth of the three is the
 thirty-first of the three is the
 thirty-second of the three is the
 thirty-third of the three is the
 thirty-fourth of the three is the
 thirty-fifth of the three is the
 thirty-sixth of the three is the
 thirty-seventh of the three is the
 thirty-eighth of the three is the
 thirty-ninth of the three is the
 fortieth of the three is the
 forty-first of the three is the
 forty-second of the three is the
 forty-third of the three is the
 forty-fourth of the three is the
 forty-fifth of the three is the
 forty-sixth of the three is the
 forty-seventh of the three is the
 forty-eighth of the three is the
 forty-ninth of the three is the
 fiftieth of the three is the
 fifty-first of the three is the
 fifty-second of the three is the
 fifty-third of the three is the
 fifty-fourth of the three is the
 fifty-fifth of the three is the
 fifty-sixth of the three is the
 fifty-seventh of the three is the
 fifty-eighth of the three is the
 fifty-ninth of the three is the
 sixtieth of the three is the
 sixty-first of the three is the
 sixty-second of the three is the
 sixty-third of the three is the
 sixty-fourth of the three is the
 sixty-fifth of the three is the
 sixty-sixth of the three is the
 sixty-seventh of the three is the
 sixty-eighth of the three is the
 sixty-ninth of the three is the
 seventieth of the three is the
 seventy-first of the three is the
 seventy-second of the three is the
 seventy-third of the three is the
 seventy-fourth of the three is the
 seventy-fifth of the three is the
 seventy-sixth of the three is the
 seventy-seventh of the three is the
 seventy-eighth of the three is the
 seventy-ninth of the three is the
 eightieth of the three is the
 eighty-first of the three is the
 eighty-second of the three is the
 eighty-third of the three is the
 eighty-fourth of the three is the
 eighty-fifth of the three is the
 eighty-sixth of the three is the
 eighty-seventh of the three is the
 eighty-eighth of the three is the
 eighty-ninth of the three is the
 ninetieth of the three is the
 ninety-first of the three is the
 ninety-second of the three is the
 ninety-third of the three is the
 ninety-fourth of the three is the
 ninety-fifth of the three is the
 ninety-sixth of the three is the
 ninety-seventh of the three is the
 ninety-eighth of the three is the
 ninety-ninth of the three is the
 hundredth of the three is the

wisdom of Providence remarkably displayed; for here the very circumstance of an injury done to a party is the means, by which the Vital Principle is excited to an increased exertion in its behalf.

No where in the course of this Essay, could the connection between Dyspepsia and Hypochondriasis, be more properly considered, than under the view of the remote causes of the former. In doing which, as my sentiments are opposite to those, of the most respectable Authorities of our country, I shall scarcely be able to offer a sufficient apology. But as no practical difference, can arise from this variety of opinion, I shall without hesitation, proceed to the examination of the Subject. That a degree of Hypochondriasis does take place, in consequence of a diseased condition of the Alimentary Canal, as symptomatic of that affection, I presume will not be denied. But also that Hypochondriasis, as an Idiopathic disease, originating in the Mind, does occur, I feel perfectly convinced; and for such a belief, shall briefly state my



reasons. Dr Caldwell, in his Edition of Cullen's First
 Lines, under article (Hypochondriasis,) gives us his rea-
 sons for an entirely opposite opinion. He says, "we
 feel persuaded, that the depression of spirits &c. origi-
 nate in a morbid condition of the Stomach. on
 that organ, is produced, by some cause, an irritation
 sui generis, which constitutes the actual source of the
 disease." And this irritation, sui generis, constitute the
 source of the disease, should it ^{not} universally precede
 any affection of the mind? But it is well known
 that Hypochondriasis does occur, without any pre-
 vious Gastric Disorder, and indeed may exist for
 a length of time without the occurrence of any
 affection of the Stomach. Considering our imper-
 fect knowledge of the connexion between mind and
 matter, would not the most reasonable conclusion
 be, that the cause of this irritation sui generis, was
 seated in the mind; and that the affection of the
 Stomach, was symptomatic of the mental disor-
 der? The first argument adduced by Doctor in

Caldwell, I consider equally applicable to the converse of the proposition, viz. the causes which produce Hypochondriasis, produce Gastric disorder. The second, pallor of the complexion &c, and all the circumstances, mentioned under the third and fourth heads, I consider as entirely inconclusive; these occurrences being symptomatic of the Gastric affections, which has for its original cause, the Mental disease. The facts stated under head 5th, I conceive to militate completely against the Doctor's argument, viz. that the sensations are always referred to the Stomach and Bowels, what I would ask is Sensation? It is the result of an impression, conveyed to the Sensorium. What impression then could be made on the Stomach and Bowels, to convey to the Sensorium, the Idea of a man's pregnancy, a flock of birds consuming the aliment, a mechanic at work in the Bowels? I presume it is evident, there can be none. There fore it must be through the Medium of a disordered Imagination, acted upon by

some external cause, that such an impression is produced, and carried by Sympathy to the abdominal viscera. The brain and nerves being the seat of the mental disease, and also of the Nervous Influence, the one cannot occur, without a change of the other. The Sensorium being disordered erroneous impressions are produced, and erroneous sensations propagated, hence, a natural distribution of the nervous Energy, if it ever takes place, is in a measure accidental. For example, that which should have supplied the extremities, is by a kind of *Error Loci*, sent to some of the abdominal or thoracic viscera. And thus are created those false sensations referred to. I will only add, that were Hypochondriacs, dependent on a morbid condition of the alimentary canal, would not the cure be much more certainly accomplished? Yet how often is medical skill completely baffled, and we constrained to exclaim, "Canst thou not Minister to a mind diseased?"

The first of these is the fact that the
 system of government in England is the best
 system of government in the world. It is the
 best system of government in the world
 because it is the only system of government
 in the world which is based on the principle
 of the separation of powers. The separation
 of powers is the principle that the
 legislative, executive, and judicial
 powers of government should be
 separated into three distinct branches.
 The legislative branch is the branch
 which makes the laws. The executive
 branch is the branch which carries out
 the laws. The judicial branch is the
 branch which interprets the laws.
 The separation of powers is the principle
 which has made the system of government
 in England the best system of government
 in the world. It is the only system of
 government in the world which is based
 on the principle of the separation of
 powers. It is the only system of
 government in the world which has
 made the system of government in
 England the best system of government
 in the world. It is the only system of
 government in the world which has
 made the system of government in
 England the best system of government
 in the world.

Diagnosis.

Were we to consider all the Diseases, with which Dyspepsia might be confounded; with all the characteristic Symptoms of each; the limits of an inaugural Dissertation would be far exceeded. We shall therefore confine ourselves to a few of the most important, and for which, it would most likely be mistaken. And first, of Hypochondriasis. Dyspepsia may be distinguished from Hypochondriasis, by the more frequent occurrence of the latter, in persons of advanced age, and of a melancholic temperament. In Dyspepsia, the mind is less affected: the languor, listlessness, suspicious disposition; want of resolution and activity, and fear of death, which characterize Hypochondriasis, are absent, or if present, are much slighter; and always subsequent to the Dyspeptic Symptoms. Symptoms of Dyspepsia, sometimes occur in melancholia; but here, the mental disease is always previous to the Gastric affection. Pyrosis is to be distinguished from Dyspepsia, by the one being generally the result of low diet; the other, of luxuriant

livings. The symptoms of the one occur mostly in the morning, on an empty Stomach; the other is common at all times, especially after meals, when the Stomach is loaded; the discharge from the Stomach, in the one case, is fluid and acid, in the other, it partakes of the nature of the food taken in, and has greater consistence.

Perhaps there is no method by which organic affections of the Stomach, can be distinguished from Dyspepsia, arising from other causes, unless it be, that in the first case, few of the usual causes of Dyspepsia are present, and that its attack is more sudden and unaccountable.

Palpitations which arise from organic affections of the heart, may be distinguished from those occurring as a symptomatic of Dyspepsia, by the pulsations of the artery at the wrist, in the former, corresponding with the Diastole and Systole of the Heart. [Corvisart.]

Prognosis

This Disease though not often of itself fatal, yet frequently gives rise to other

diseases, which finally destroy the Patient. The difficulty of cure, is somewhat dependent on the nature of the remote causes. If it be such as is easily removed, and the disease be not long standing; the patient young, and naturally of a healthy or robust constitution, we may hope for a speedy cure. But if the cause be not very obvious, the disease of long continuance, and the patient of a delicate constitution, or of a leucophlegmatic habit, we may be assured of the extreme difficulty of the case.

Cure.

In the cure of Dyspepsia, three important indications are to be fulfilled.

- First: To remove the remote causes.
- Secondly, To palliate present urgent symptoms.
- Thirdly. To restore tone to the Stomach.

First, To remove the remote causes.

In removing the remote causes of Dyspepsia, it will be necessary to avoid every thing, likely to pro-

due gastric discharges, by acting directly on the stomach; and here must be considered every irregularity of diet, both as to quality and quantity. Those persons who pamper a depraved appetite with highly seasoned aliments, must relinquish the pleasures of the Table.

Those who are given to the immoderate use of Tobacco, or have fallen into the more pernicious habit of using opium, or other narcotics, whether for the purpose of allaying the pain of bodily disease, or soothing the anguish of mental afflictions, must resign the fond, but fatal delusion, or abide its miserable consequences. Those causes which affect the body generally, should likewise be avoided. And first, An indolent life. Those who are in circumstances not requiring their personal exertion, in order to support them, should be convinced of the importance of exercise. The Fashionable Devotee must forsake his beloved amusements; and seek not to distort the form, which nature has given him, by the ridiculous, as well as hurtful inventions

of man. He must cease to be the victim of Fashion, or become the victim of Disease. The Debauchee must give up his visits to the house of lust and folly, and curb the impulse of a misguided nature, or incur the penalty. The victim of Intemperance must restrain his wit propensity, and quit his midnight revels, or soon place himself beyond the reach of medicine. The subjects of passion must endeavour as much as possible, to avoid the circumstances which would be most likely to bring into action such a cause. The unhappy Hypochondriac should be indulged in all his innocent caprices, and his desponding mind cheered with every reasonable hope.

The studious must exchange their favourite pursuit of Science, for more active employment; more time must be devoted to sleep, and a well regulated exercise. That the removal of the remote causes of Disease, is absolutely necessary, must be evident; as well might we attempt to extinguish the fire of a furnace, by pouring water from above, when fresh fuel was

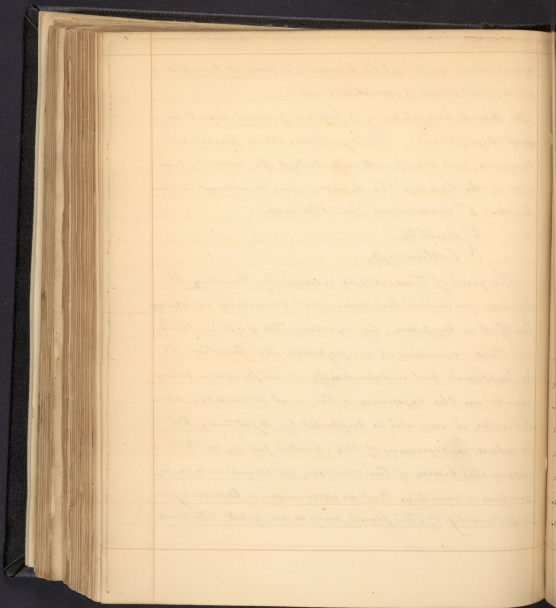
added below, as attempt the removal of a train of symptoms, while the remote cause still existed.

The Second Indication is, to palliate present urgent symptoms. The symptoms which prevail in Dyspnoea, and which not only distress the patient, but also tend to keep up the disease, may be reduced to three kinds. 1st Cruditie in the Stomach.

2^d Acidity.

3^d Costiveness.

The first of these is to be relieved by Emetics. It has been contended by some, that vomiting is always hurtful in Dyspnoea, by rejecting the gastric fluid, and thus rendering it impossible for Digestion to be performed; but independently of the practice being founded on the experience of the most respectable authorities, it can also be supported by Hypothesis. And we admit a deficiency of the Gastric juice, as the proximate cause of the disease, we should necessarily condemn vomiting. But as we consider a deficiency, or a depravity of this fluid, only as an effect, the cause



of which is often removed by vomiting, we must con-
tinue for the propriety of the practice. The benefi-
cial effects of emetics, are not confined to the mere
evacuation of the Stomach, but the operation of
vomiting, so far overcomes its morbid action, as to
enable the system to react, and restore the Ner-
vous Energy to that organ. In order to correct aci-
dity, we should first, avoid as much as possible, all
accescent food: and secondly, correct what is unavoid-
ably produced, by alkalies, and absorbents. The caustic
alkali is said to be preferable; and no doubt, founded
on experience, as more acid is liberated from the milk,
than caustic alkali. Lime water and milk, is a
favourite remedy of our School. To answer two in-
dications, the calcined Magnesia may be used. To
correct acidity, and remove costiveness. Should an oppo-
site state from the latter occur, the cretaceous pulp,
combined with Laudanum, is advantageously employ-
ed. A remedy in many states of Dyspepsia, particu-
larly in those accompanied with painful, spasmodic

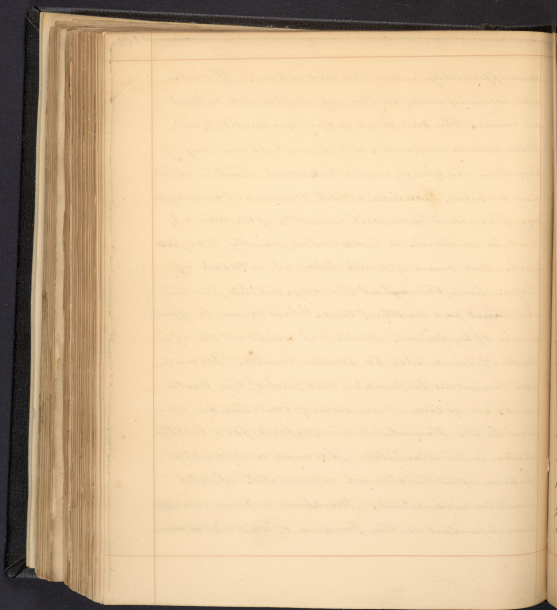
affections of the Stomach, has been employed, with advantage. It is the Infusion of Nigella Ashes, and Loos-

This remedy appears to unite two advantages, by correcting acidity, and restoring tone to the Stomach.

The effects of this medicine, have been attributed to the sub-carb. pot. which, it contains; but in this opinion, we cannot entirely acquiesce, since it has succeeded where the sub-carb. pot. has failed: and may not its different effects, be ascribed to some virtue, consisting in the impurities, of the infusion?

The third part of this indication, still remains to be considered, viz. to remove costiveness. Those medicines which act on the great intestines have been recommended; but as they are principally Bloctics, and these always leave a disposition to costiveness, we think them somewhat objectionable. Rhubarb has been employed; it is perhaps best combined with Magnesia. An excellent laxative, is the Lac Sulphuris. But with the twofold view above mentioned, we prefer the calcined Magnesia. Perhaps a periodical solicitation of an evacuation would

most effectually answer this indication. If nausea and vomiting occur, the Stomach should first be relieved by an emetic. The Diet should be strictly attended to, and those articles only eaten, which are light and easy of Digestion. To specify each article which should, or should not be eaten, I consider as both tedious and unnecessary. The quantity, as well as quality of the Aliment, must be considered. A milk diet is generally to be preferred. One ounce of milk, taken at intervals of half an hour, throughout the day; and this practice continued for a length of time, I have known to effect a cure of Dyspepsia, which had resisted all the efforts of Medicine, for fourteen months. Too much care cannot be bestowed on this part of the treatment: for so long as new causes of irritation are applied to the Stomach, it is impossible for a healthy action to be established. If nausea and vomiting continue, after the Stomach is evacuated, opiates should be administered. Heartburn as being sometimes dependent on the presence of an acid, and some-



times of an alkali, must be relieved by the administration of a corrective of either of these states. Eructations can only be obviated, by opposing the disposition to fermentations in the Stomach; which is best done by restoring its tone. The sense of weight about the Stomach, oppression, flatulency and Incurtus, which occur in Dyspepsia, often arise from the presence of too much food in the Stomach, which not being digested, acts almost as an extraneous substance.

These symptoms can only be mitigated, by removing the exciting causes. Many symptoms still remain to be palliated, but this must be done, by attending to the Third general Indication, To Restore Tone to the Stomach.

Having adopted this Indication, in pursuance of Cullen, who considers it, as removing the proximate cause, it may seem that I am departing from my first principles; but this supposition will appear groundless, when I state, that a loss of tone, in the muscular fibres of the Stomach, I consider as the

immediate consequence, of a deficiency of Nervous Energy; and a restoration of tone, consequently must be the first sensible effect of reestablishing a due supply of this power. Therefore as we can only judge of the removal of the proximate cause, by a removal of its effects, I see no reason to alter this indication, which has been so universally adopted. This Indication then, is to be fulfilled, 1st By those remedies which act immediately on the Stomach; and 2^d By those which act on the System generally. The first of these may again be divided, into those, extracted from the vegetable, and those from the Mineral Kingdom.

The vegetable Bitters, and Aromatics, as possessing a tonic power, have all been employed with a view of strengthening the stomach. The cinchona cortex, Decoction, and Gentian, are perhaps the most useful. A remedy combining the property of a tonic, with that of an anodyne, has lately been highly recommended in Dyspepsia: I mean the common Hop; and is entitled to no small degree of notice. The Ipecacuan.

ha, in small doses, with a view to its alterant effect, has been successfully employed in this disease. I must not omit to mention a remedy, the efficacy of which, though not a personal witness, I can vouch for, on respectable authority. It is the bark of a species of the oak, common throughout our country, called the Scrub oak. The Spirituous Tincture of the inner bark, was used; the disease was obstinate and distressing, and had baffled respectable Medical Skill; this remedy was resorted to, and succeeded in a short time, in restoring the healthy action of the Stomach.

The remedies derived from the Mineral Kingdom, which have been used in Dyspepsias are all the Mineral acids, particularly the Sulphuric; of this, the Elixir vitriol is perhaps the most pleasant, and equally useful form. The Tinct. Martis, has been recommended, and also the oxide of Bismuth. But of all the Saline Preparations, the Muriate of Soda, is said to excel. The chalybeate preparations have been universally employed, to give tone to the Sto-

mach, and often with advantage. With this view, the various chalybeate waters of our country have been resorted to, by Dyspeptics, and no doubt with happy effects. But their efficacy is greatly increased by many concomitant circumstances. The exercise of travelling, the change of scene, and delightful Society, generally met with, at watering places, all conspire, not only to give tone to the system, but also by diverting the thoughts of the desponding Invalid, from his situation, and thus breaking the chain of diseased action, the Stomach is rendered more susceptible of the remedies directed to it. The last part of the Indication, consists in the use of such remedies as give tone to the Stomach, through the medium of the general System. The cold and tepid baths, have each been beneficially employed. When Dyspepsia has arisen from an obstruction of any of the chyliferous viscera, a course of mercury has been attended with the happiest effects. Great benefit

40
has been often experienced, from the application of
a Blister to the region of the Stomach.

But in addition to all the above remedies, the pa-
tient must avoid every cause of debility; regular
exercise should be taken, and one third of his
time at least, devoted to his pillow. He should ex-
change a town, for a country life, his occupati-
on within doors, for the sports of the field, where
the body is exercised, and the mind diverted. He
should be entertained with the Society of a few select
friends, and indulged with a hope of recovery, if
reasonable; and lastly, to keep his mind untroubled,
he should strive to preserve a conscience void of of-
fence, and leave the event in the hands of the
Disposer of Life and Death...

